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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Takeshi Kamata

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EXAMINER

TADAYYON ESLAMI, TABASSOM

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/523,975	Applicant(s) KAMATA ET AL.	
	Examiner TABASSOM TADAYYON ESLAMI	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over W. Katzschner et al (U. S. Patent: 4503437, here after 437), further in view of J. C. Gemelli (U. S. Patent: 3068838, here after 838), Hiroaki Kobayashi (U. S. Patent: 6328488, here after 488), and A. Richardson et al (U. S. Patent: 2749880, here after Richardson).

3. Claim 1 is rejected. 437 teaches a method of automatically marking(labeling) an article with a device in which the article is transferred in one direction[abstract lines 1-2], comprising the steps of: storing in advance a pattern for coloring an outer surface of the article with a coloring agent of respective colors different from each other[abstract last 3 lines], 437 teaches applying color to the cable by a print head[column 2 lines 28-43]; and spouting coloring agent of respective specific amount toward the outer surface of the article according to the pattern[abstract lines 1-end]. 437 teaches a coating liquid jet (structure SK in fig. 1) for jetting the liquid and also teaches the detection means (DG in fig. 1) for measuring the moving speed of the cable and a control means(SK and ST in fig. 1) for controlling the coating liquid jet based on the speed of the cable [column 3 lines 14-53]. 437 also teaches existing of plurality of nozzles [claim 1]. 437 does

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not specifically teaches multiple nozzles eject different color to the cable. 838 teaches an apparatus for marking a cable [column 1 lines 1-2] where the marking step is done by multiple nozzles (74, fig. 1 and fig. 2) arranged along a circumferential direction around the cable, separated and spaced from each others (26 fig. 1 and 2) to apply plurality of different colored inks to the wire [column 1 lines 41-43]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437 teaches by nozzles taught by 838 with expectation of success, because 838 teaches this nozzle arrangement is appropriate to mark a cable. They do not teach each nozzle having a coloring agent supply source and a valve between the nozzle and supply source. 488 teaches an apparatus for applying liquid to a surface with nozzles [column 1 lines 6-14]. 488 teaches the apparatus comprising valve (24) between the reservoir (supplying solution , 22) and the nozzles (25), where the valve control opening and shutting of a flow path for the solution[column 13 lines 27-40,fig. 2]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437 teaches where the nozzles structure are taught by 488, because 488 teaches a valve between the nozzle and source(supplying coloring agents) helps to control opening and closing the nozzles. 488 also teaches the nozzles are capable for forming spots on the surface (the outer surface of cable) (fig. 2). None of the above references teach supplying pressurized gas into a coloring agent supply source (reservoir). Richardson teaches a method of marking cables [title] where marking fluid is

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subjected to pressure air(gas) in the reservoir(coloring agent supply source)[column 1 lines 38-42]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437, 838 and 488 teaches where the pressure air is applied to reservoir as Richardson teaches, because Richardson teaches it helps the fluid to flow from the reservoir to the nozzles. When the valve between the source and the nozzle is open, the pressure gas inherently biases the coloring agent to spout toward the outer surface of the electric cable (as it is purposed to mark the cable).

Claim 2 is rejected. 437, 838 and 824 teach the limitation of claim 1 and 437 further teaches the article is an electric wire [abstract lines 1-2].

Claim 3 is rejected. 437 teaches a method of automatically marking(labeling) an article with a device in which the article is transferred in one direction[abstract lines 1-2], comprising the steps of: storing in advance a pattern for coloring an outer surface of the article with a coloring agent, 437 teaches applying color to the cable by a print head[column 2 lines 28-43]; and spouting coloring agent of respective specific amount toward the outer surface of the article according to the pattern[abstract lines 1-end]. 437 teaches a coating liquid jet (structure SK in fig. 1) for jetting the liquid and also teaches the detection means (DG in fig. 1) for measuring the moving speed of the cable and a control means(SK and ST in fig. 1) for controlling the coating liquid jet based on the speed of the cable [column 3 lines 14-53]. 437 does not specifically teaches multiple nuzzles eject different color to the cable. 838 teaches an apparatus for

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marking a cable [column 1 lines 1-2] where the marking step is done by multiple nozzles (74, fig. 1 and fig. 2) arranged along a circumferential direction around the cable, separated and spaced from each others (26 fig. 1 and 2), to apply plurality of different colored inks to the wire [column 1 lines 41-43]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437 teaches by nozzles taught by 838 with expectation of success, because 838 teaches this nozzle arrangement is appropriate to mark a cable. They do not teach each nozzle having a coloring agent supply source and a valve between the nozzle and supply source. 488 teaches an apparatus for applying liquid to a surface with nozzles [column 1 lines 6-14]. 488 teaches the apparatus comprising valve (24) between the reservoir (supplying solution , 22) and the nozzles (25), where the valve control opening and shutting of a flow path for the solution[column 13 lines 27-40,fig. 2]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437, and 838 teach where the nozzles structure are taught by 488, because 488 teaches a valve between the nozzle and source (supplying coloring agents) helps to control opening and closing the nozzles. 488 also teaches the nozzles are capable for forming spots on the surface (the outer surface of cable) (fig. 2). None of the above references teach supplying pressurized gas into a coloring agent supply source (reservoir). Richardson teaches a method of marking cables [title] where marking fluid is subjected to pressure air(gas) in the reservoir(coloring agent supply source)[column 1 lines 38-42]. Therefore it would have

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been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437, 838 and 488 teach where the pressure air is applied to reservoir as Richardson teaches, because Richardson teaches it helps the fluid to flow from the reservoir to the nozzles. When the valve between the source and the nozzle is open, the pressure gas inherently biases the coloring agent to spout toward the outer surface of the electric cable (as it is purposed to mark the cable).

Claim 4 is rejected. 437, 838 and 838 teach the limitation of claim 3 as discussed above and 437 teaches the plurality of the spouting means (nozzles) are arranged along the transfer direction of the article (fig. 1) and a control means makes the spouting means spout the coloring agent according to a distance between the spouting means [column 3 lines 14 to column 5 line 28].

Claim 5 is rejected. 437, 838 and 824 teach the limitation of claim 1. 838 teaches an apparatus for marking a cable [column 1 lines 1-2] where the marking step is done by multiple nozzles (74, fig. 1 and fig. 2) arranged along a circumferential direction around the cable (26 fig. 1 and 2) to apply plurality of different colored inks to the wire [column 1 lines 41-43]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace the nozzles of the device as 437 and 824 teaches by nozzles taught by 838 with expectation of success, because 838 teaches this nozzle arrangement is appropriate to mark a cable.

Claim 6 is rejected. 437, 838, and 824 teach the limitation of claim 5 as discussed above. Although they do not specifically teach a 45 degree angle

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between the nozzle and the horizontal or vertical direction, however where the only difference between the prior art and the claims was a recitation of relative dimensions of the claimed device or configuration and a device having the claimed relative dimension or the shape (angle between the nozzles) would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device, which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration of the claimed container was significant.[MPEP 2144.04.B]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to have the device as 437, 838, and 824 teach where the angle between the nozzle and the horizontal, or perpendicular direction is 45 degree, because Changing in the shape or configuration as long as does not perform differently than the prior art is not patentable over the prior art.

Claim 7 is rejected. 437, 838, and 824 teach the limitation of claims 3-6 and 838 teaches a device body for receiving the storing means and the control means, wherein the device body comprises a plurality of connectors for connecting the device body to the spouting means and the connectors are provided in the same number as that of the spouting [fig. 1].

Claim 8 is rejected. 437, 838, and 824 teach the limitation of claims 3-6 and 437 further teaches the article is an electric wire [abstract lines 1-2].

4. Claims 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over W. Katzschner et al (U. S. Patent: 4503437, here after 437), further in view of J. C. Gemelli (U. S. Patent: 3068838, here after 838), Hiroaki Kobayashi (U. S.

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Patent: 6328488, here after 488), and A. Richardson et al (U. S. Patent: 2749880, here after Richardson, as applied to claim 8 above and further in view of Traut et al (U. S. Patent: 5237917, here after 917).

Claim 9 is rejected. 437, 838, 488 and Richardson teach the limitation of claim 8 as discussed above. They do not teach cutting the cable (electric wire) after transferring the cable in said one direction. 917 teaches a device for marking a cable with ink jet printer (nozzles) and cutting the cable afterward [abstract lines 1-end]. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention was made to replace marking unit of the 917 device with what 437, 838, 488 and Richardson teach, because 437, 838, and 824 teach their device is capable to mark the electric wire.

Response to Arguments

5. Applicant's arguments filed 07/27/09 have been fully considered but they are not persuasive. The applicant argues Katzschnner does not teach the nozzle are separated and spaced from each others. However the nozzle configuration of Gemelli teaches this new limitation of amended claims. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be

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established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, combining the spiral stripe forming Gemelli device in combination with Katzchner is to print the cable without rotating the cable and for speeding the process.

The applicant argues Kobayashi can not be combined with Katzshner and Gemelli. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

6. The applicant argues Kobayashi and Richardson do not teach the nozzles are spaced and separated from each others. However the nozzle configuration of Gemelli teaches this new limitation of amended claims. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208

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USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

The applicant argues combining last three references with Richardson and is not reasonable to combine four different references to reject a claim. In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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1. The applicant argues Richardson system applies helical stripes to a cable rather than spots. However, Hiroaki Kobayashi teaches applying sports to the surface (of a cable).
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TABASSOM TADAYYON ESLAMI whose telephone number is (571)270-1885. The examiner can normally be reached on 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Tabassom T. Tadayyon-Eslami
Examiner

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/Tabassom T. Tadayyon-Eslami/

Examiner, Art Unit 1792

/Michael Cleveland/

Supervisory Patent Examiner, Art Unit 1792